

SAS® Certified Base Programmer for SAS®9

A00-211

Course Syllabus

12.8 Hours

Course Description

Programming 1 course is for learners who want to learn how to write SAS programs. It is the entry point to learning SAS programming and is a prerequisite to many other SAS courses. Programming 2 is for those who need to learn data manipulation techniques using SAS DATA and PROCEDURE steps to access, transform, and summarize SAS data sets. The course builds on the concepts that are presented in the SAS® Programming 1: Essentials course.

This course covers the objectives for the certification exams:

- **SAS® Certified Base Programmer for SAS®9**

Learning Objectives

Upon completion of the course, students will understand how to:

- Navigate the SAS Studio programming environment
- Navigate the SAS Enterprise Guide programming environment
- Navigate the SAS windowing environment
- Read various types of data into SAS data sets
- Create SAS variables and subset data
- Combine SAS data sets
- Create and enhance listing and summary reports
- Control SAS data set input and output
- Combine SAS data sets
- Summarize, read, and write different types of data
- Perform DO loop and SAS array processing
- Transform character, numeric, and date variables

Course Format

SAS Programming 1 & 2 is a self-paced, online course delivered through the learning management system Skillsoft. The site to access the coursework is su.skillport.com. Login credentials will be provided to you on the cohort launch date. If you do not receive them by the launch date, please check your Spam/Junk folder of your email and/or contact your advisor or O2O program coordinator. Once you have logged into your account, you can locate the coursework by selecting “View My Learning Plan.”

Coursework is delivered through videos, tutorials, and tests. No textbooks are required for the course; however, students are encouraged to utilize additional resources to assist with certification preparation. Resource Guides with lists of supplemental study materials for each certification are available at <http://libguide.getvet.syr.edu/curriculum/>.

In order to complete the online exercises, you will need to download the free SAS University Edition software. You can find the free download here: https://www.sas.com/en_us/software/university-edition.html. SAS provides download and installation guides for Windows, OS X and Linux operation systems. If you encounter any issues with the download, please view the Help Center: <https://support.sas.com/software/products/university-edition/faq/main.htm>.

Course Completion Requirements

SAS Programming 1 & 2 coursework is due within 90 days from the assignment date. The course hours listed at the top of the syllabus reflect the time it would take to click through the slides and do not account for taking notes or the end of module tests. You must complete all twelve modules in Topic 1 and all thirteen modules in Topic 2. Successful completion of a module is marked after you review the lesson videos and score 80% or higher on the end of module quizzes. A non-credit certificate of completion will be awarded for successful completion of the coursework.

Industry Certification Requirements

In order for the program to fund your SAS® Certified Base Programmer for SAS®9 certification exam, you will need to meet the associated practice exam requirements. Your advisor or O2O program coordinator will provide you with access to the practice exams as well as completion instructions once you have finished the coursework.

Support

- For technical support, program support or questions, please contact your advisor or O2O program coordinator

Course Outline

Topic 1: SAS Programming 1: Essentials

- 1.1 SAS Programming 1: Course Overview and Data Setup
- 1.2 SAS Programming 1: Getting Started with SAS Programming
- 1.3 SAS Programming 1: Working with SAS Programs
- 1.4 SAS Programming 1: Accessing Data
- 1.5 SAS Programming 1: Producing Detail Reports
- 1.6 SAS Programming 1: Formatting Data Values
- 1.7 SAS Programming 1: Reading SAS Data Sets
- 1.8 SAS Programming 1: Reading Spreadsheet and Database Data
- 1.9 SAS Programming 1: Reading Raw Data Files
- 1.10 SAS Programming 1: Manipulating Data
- 1.11 SAS Programming 1: Combining SAS Data Sets
- 1.12 SAS Programming 1: Creating Summary Reports

Topic 2: SAS Programming 2: Data Manipulation Techniques

- 2.1 SAS Programming 2: Course Overview and Setup
- 2.2 SAS Programming 2: Controlling Input and Output
- 2.3 SAS Programming 2: Summarizing Data
- 2.4 SAS Programming 2: Reading Raw Data
- 2.5 SAS Programming 2: Manipulating Character Values

- 2.6 SAS Programming 2: Manipulating Numeric Values
- 2.7 SAS Programming 2: Debugging Techniques
- 2.8 SAS Programming 2: Using Iterative DO Loops
- 2.9 SAS Programming 2: Using SAS Arrays
- 2.10 SAS Programming 2: Combining SAS Data Sets
- 2.11 SAS Programming 2: Creating and Maintaining Permanent Formats
- 2.12 SAS Programming 2: An Introduction to the SQL Procedure
- 2.13 SAS Programming 2: An Introduction to the SAS Macro Facility